

ABSTRACT

Provided is a thermoplastic resin composition comprising (A) a styrene resin, (B) a propylene resin and (C) a hydrogenated block copolymer comprising at least two polystyrene blocks Xs and at least one polybutadiene block Y, with at least 70 wt.% of the double bonds of the polybutadiene of the polybutadiene block Y having been hydrogenated, wherein the hydrogenated block copolymer (C) has a styrene content of 40 to 80 wt.%; a 1,2-bound amount of the polybutadiene block Y is 30 to 80 wt.%; a weight ratio of the component (A) to the component (B) is 95:5 to 5:95; the component (C) is contained in an amount of 2 to 30 parts by weight based on 100 parts by weight of the components (A) and (B); and at least 50% of the component (C) exists at the interface between a phase of the component (A) and a phase of the component (B). Existence of this component (C) makes it possible to yield a thermoplastic resin composition having excellent heat resistance and oil resistance and having comparable tensile elongation properties.

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(54) Title: THERMOFORMABLE, CHEMICAL RESISTANT POLYMER BLENDS

(57) Abstract

A thermoformable chemical resistant polymer blend, useful in the preparation of refrigerator and freezer liners comprising: A) from 45 to 70 parts by weight impact modified monovinylidene aromatic polymer, comprising from 1 to 25 weight percent of a rubber and 75 to 99 weight percent of a monovinylidene aromatic polymer matrix having a molecular weight (Mw) from 50,000 to 400,000, said weight percents being based on the total weight of said impact modified, vinylaromatic polymer; B) from 15 to 40 parts by weight of an olefin polymer, selected from the group consisting of homopolymers of ethylene or propylene and copolymers of ethylene with one or more C₄₋₈α-olefins; and C) from 5 to 25 parts by weight of a compatibilizing polymer, adapted to increase interfacial adhesion between components A) and B), components A) and B) or components A), B) and C) existing in said blend as co-continuous phases, and the sum of A), B) and C) being 100 parts.